CLAIMS

1. A phenyl sulfamate derivative represented by the following formula, or a salt thereof.

$$\begin{array}{c|c}
R^{1} & O & A \\
R^{2} & O & R^{3}
\end{array}$$
(I)

wherein

R¹ and R² each independently represent a hydrogen atom or a lower alkyl group;

 R^3 represents a hydrogen atom, a halogen atom, a lower alkyl group, $-OSO_2NR^1R^2$, a lower alkanoylamino group, a nitro group or a cyano group; and

A represents a substituted or unsubstituted phenyl group, a naphthyl group, a pyridyl group, 2-substituted thiazol-4-yl group, 3-substituted isoxazol-5-yl group, 1-cyano-2-(substituted or unsubstituted phenyl)vinyl group, 2-cyano-2-(substituted or unsubstituted phenyl)vinyl group, or a group of the formula -X-NR⁴R⁵ [in which X represents CO or CH₂, R⁴ represents a hydrogen atom, a lower alkyl group, a substituted or unsubstituted phenyl group, a lower alkanoyl group, a substituted or unsubstituted phenylcarbonyl group, a heteroarylcarbonyl group, a lower alkylsulfonyl group, a sulfamoyl group, a lower alkanoylamino group, a di(lower alkyl)amino group, a heteroaryl group, a heteroaryl-substituted lower alkyl group, or a substituted or unsubstituted phenylmethyl group, and R⁵ represents a hydrogen atom, a substituted or unsubstituted phenyl group, or a substituted or unsubstituted phenyl group, provided that

① when X represents CO, R⁴ represents a group other than a lower alkanoyl group, a substituted or unsubstituted phenylcarbonyl group, a heteroarylcarbonyl group, a lower alkylsulfonyl group, and a sulfamoyl

group, and \mathbb{R}^5 represents a group other than a substituted or unsubstituted phenylcarbonyl group;

- ⁴ when R⁴ represents a lower alkanoyl group, a substituted or unsubstituted phenylcarbonyl group, a heteroarylcarbonyl group, a lower alkylsulfonyl group, or a sulfamoyl group, X represents CH₂ and R⁵ represents a group other than a substituted or unsubstituted phenylcarbonyl group; and
- ® when R^5 represents a substituted or unsubstituted phenylcarbonyl group, X represents CH_2 and R^4 represents a group other than a lower alkanoyl group, a substituted or unsubstituted phenylcarbonyl group, a heteroarylcarbonyl group, a lower alkylsulfonyl group, and a sulfamoyl group]; or

 R^3 and A, together with the phenyl group to which they are attached, represent a fluoren-2-yl or 9-oxofluoren-2-yl group; provided that, when R^3 represents a hydrogen atom, A does not represent an unsubstituted phenyl group.

- 2. A phenyl sulfamate derivative or a salt thereof as claimed in claim 1 wherein both R^1 and R^2 represent hydrogen atoms.
- 3. A phenyl sulfamate derivative or a salt thereof as claimed in claim 1 or 2 wherein R³ represents a hydrogen atom or a halogen atom.
- 4. A phenyl sulfamate derivative or a salt thereof as claimed in any of claims 1 to 3 wherein A is located at the 4-position.
- 5. A phenyl sulfamate derivative or a salt thereof as claimed in any of claims 1 to 4 wherein A represents a substituted phenyl group or a group of the formula -X-NR⁴R⁵.
- 6. A phenyl sulfamate devivative or a salt thereof as claimed in

Sub Bl claim 5 wherein the substituted phenyl group is a phenyl group substituted by one or two substituents selected from halogen, lower alkyl, halogen-substituted lower alkyl, cyano-substituted lower alkyl, lower alkoxy, lower alkanoyloxy, -OSO₂NR¹R², organic sulfonyloxy, amino, lower alkanoylamino, -NHSO₂NR¹R², organic sulfonylamino, nitro, cyano, carboxyl and lower alkoxycarbonyl.

- 7. A phenyl sulfamate derivative or a salt thereof as claimed in claim 6 wherein, in the substituted phenyl group, the substituent or substituents are located at the 2- and/or 4-positions of the phenyl group.
- 8. A phenyl sulfamate derivative or a salt thereof as claimed in claim 5 wherein A represents a group of the formula -X-NR⁴R⁵ and R⁴ represents a hydrogen atom, a lower alkyl group or a heteroaryl group.
- 9. A phenyl sulfamate derivative or a salt thereof as claimed in claim 8 wherein the heteroaryl group is a five- or six-membered monocyclic heteroaryl group containing 1 to 3 nitrogen atoms.
- 10. A phenyl sulfamate derivative or a salt thereof as claimed in claim 5 wherein R⁵ represents a substituted phenyl group.
- 11. A phenyl sulfamate derivative or a salt thereof as claimed in claim 10 wherein the substituted phenyl group is a phenyl group substituted by one or two substituents selected from hydroxyl, lower alkanoyloxy, -OSO₂NR¹R², nitro and cyano.



12. A steroid sulfatase inhibitor containing, as an active ingredient, a phenyl sulfamate derivative of formula (I) or a salt thereof as claimed in any of claims 1 to 11.

13. An agent for the treatment of breast cancer, corpus uteri cancer, endometrial hyperplasia, infertility, endometriosis, adenomyosis uteri, autoimmune diseases, dementia or Alzheimer's disease, which contains, as an active ingredient, a phenyl sulfamate derivative of formula (I) or a salt thereof as claimed in any of claims 1 to 11.

SUB A2

- 14. A pharmaceutical composition comprising a phenyl sulfamate derivative of formula (I) or a salt thereof as claimed in any of claims 1 to 11, and a pharmaceutically acceptable adjuvant.
- 15. The use of a phenyl sulfamate derivative of formula (I) or a salt thereof as claimed in any of claims 1 to 11, for the prophylaxis or treatment of breast cancer, corpus uteri cancer, endometrial hyperplasia, infertility, endometriosis, adenomyosis uteri, autoimmune diseases, dementia or Alzheimer's disease.
- 16. A method for the prophylaxis or treatment of breast cancer, corpus uteri cancer, endometrial hyperplasia, infertility, endometriosis, adenomyosis uteri, autoimmune diseases, dementia or Alzheimer's disease in a human being or other mammal which comprises administering a phenyl sulfamate derivative of formula (I) or a salt thereof as claimed in any of claims 1 to 11, to the human being or other mammal.
- 17. The use of a phenyl sulfamate derivative of formula (I) or a salt thereof as claimed in any of claims 1 to 11, for the preparation of an agent for the treatment of breast cancer, corpus uteri cancer, endometrial hyperplasia, infertility, endometriosis, adenomyosis uteri, autoimmune diseases, dementia or Alzheimer's disease.

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